



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

re the Application

Inventor(s): Takashi YUKITAKE et al. Art Unit 2613
Application No.: 09/833,769 Examiner R. Lee
Filed: April 13, 2001
For: METHOD FOR DETERMINING MOTION COMPENSATION

STATEMENT UNDER 37 CFR 3.73(b)

Assistant Commissioner for Patents
Washington, DC 20231

RECEIVED

SEP 15 2004

Technology Center 2600

Dear Sir:

Pursuant to MPEP §1.410.01, the undersigned, a duly authorized representative of Matsushita Electric Industrial Co., Ltd., the Assignee of the entire right, title and interest in U.S. Patent No. 5,745,182, hereby establishes the Assignee's ownership interest in this patent by specifying that the evidence of such ownership interest is recorded at Reel 6322, Frame 0100 of the U.S. Patent and Trademark Office microfilm files. A copy of the recorded Assignment is attached.

For and on behalf of

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.


(Signature)

Isamu Shimura
Director, IP Development Center
Authorized Signing Officer

(Name)

May 19, 2004

(Date)

(Title)



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application

Inventor(s): Takashi YUKITAKE et al. Art Unit 2613
Application No.: 09/833,769 Examiner R. Lee
Filed: April 13, 2001
For: METHOD FOR DETERMINING MOTION COMPENSATION

ASSENT OF ASSIGNEE TO REISSUE

RECEIVED

SEP 15 2004

The Honorable Commissioner of
Patents and Trademarks
Washington, D.C. 20231

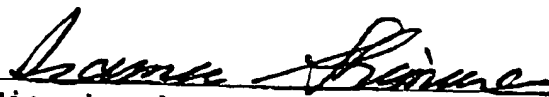
Technology Center 2600

Sir:

The undersigned, a duly authorized representative of
Matsushita Electric Industrial Co., Ltd., the Assignee of the
entire interest in U.S. Patent No. 5,745,182, hereby assents to
the above-captioned Reissue Application of said patent.

For and on behalf of

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.


(Signature)

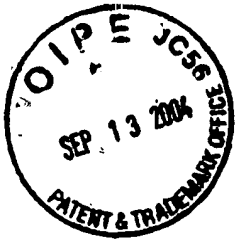
Isamu Shimura
Director, IP Development Center
Authorized Signing Officer

(Name)

May 19, 2004

(Date)

(Title)



RECEIVED

SEP 15 2004

Technology Center 2600

B 9370 - 10

SUPPLEMENTAL REISSUE DECLARATION

We, as the below-named inventors, hereby declare that our residences, post office addresses and citizenships are as stated below adjacent our names, that we verily believe we are the original, first and joint inventors of the invention described and claimed in Letters Patent No. 5,745,182 issued April 28, 1998 and in the specification filed July 20, 1994, serial number 08/278,010, and for which invention we solicit a reissue patent; that we have reviewed and understand the contents of the present application filed April 13, 2001, serial number 09/833,769, including the claims, said present application number 09/833,769 being a divisional application of parent reissue application no. 09/559,627, filed April 27, 2000; that we acknowledge our duty to disclose information of which we are aware which is material to the examination of this Reissue Application in accordance with Title 37, Code of Federal Regulations, §1.56(a); and that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States prior to filing of Application Serial No. 08/278,010 (from which Patent 5,745,182 issued) by us or our legal representatives or assigns, except as follows:

Japanese Patent Application No. 3-293004 filed November 8, 1991; and
Japanese Patent Application No. 4-181980 filed July 9, 1992.

The priority of Japanese application nos. 3-293004 and 4-181980 was claimed in said U.S. application and is also hereby claimed in this Reissue Application and certified copies are available in the patent file.

We further declare that we believe said Letters Patent is, through errors which arose without deceptive intent on the part of the applicants, wholly or partially inoperative by reason of claiming more or less than we had a right to claim in the patent. The errors relied upon as the basis for reissue include the failure to include a claim reciting "A method of obtaining motion compensation for an input image, said method comprising the steps of: (a) obtaining a first motion vector $MV1$ between the input image and one reference image $R1$ of a plurality of reference images at a second set time interval $T2$ between the input image and said one reference image $R1$; (b) calculating a second motion vector $MV2$ between the input image and another reference image $R2$ of said plurality of reference images at a first set time interval $T1$ between the input image and said another reference image $R2$, said second motion vector $MV2$ being parallel to said first motion vector $MV1$ and having a magnitude satisfying the relation $MV2 = MV1 \cdot (T1/T2)$; (c) calculating pixel values at positions corresponding to said first motion vector $MV1$ from pixels of said one reference image $R1$ and calculating pixel values at positions corresponding to said

second motion vector MV2 from pixels of said another reference image R2, wherein said reference images R1 and R2 are such that a motion vector MV3 between said reference images R1 and R2 has a mathematical relationship with said first and second motion vectors MV1 and MV2 in which said motion vector MV3 is parallel to and different in value from each of said first and second motion vectors MV1 and MV2; and (d) calculating motion-compensated pixel values from both said pixel values at positions corresponding to said first motion vector MV1 and said pixel values at positions corresponding to said second motion vector MV2 calculated in step (c) to obtain said motion compensation for said input image."

All errors in the patent which are being corrected in the present reissue application up to the time of filing of this Declaration arose without any deceptive intention on the part of the applicants.

We hereby appoint the following as our attorneys of record with full power of substitution and revocation to prosecute this application and to transact all business in the Patent and Trademark Office:

James E. Ledbetter, Registration No. 28,732; Thomas P. Pavelko, Registration No. 31,689; and Anthony P. Venturino, Registration No. 31,674.

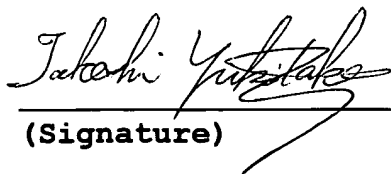
All correspondence in connection with this application should be sent to:

STEVENS DAVIS, MILLER & MOSHER, L.L.P.

1615 L Street, N.W., Suite 850
Washington, D.C. 20036
Telephone: (202) 408-5100
Facsimile: (202) 408-5200

We, as the undersigned inventors, further declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the reissue application or of any reissue patent to issue thereon.

Takeshi YUKITAKE


(Signature)

April 27, 2004
(Date)

Residence: Yokohama-shi, Japan

Citizenship: Japan

Post Office Address: 1114-D-403, Kamisugetacho, Hodogaya-ku,
Yokohama-shi, Japan

Shuji INOUE

Shuji Inoue
(Signature)

April 27, 2004
(Date)

Residence: Yokohama-shi, Japan

Citizenship: Japan

Post Office Address: 1114-C-404, Kamisugetacho, Hodogaya-ku,
Yokohama-shi, Japan